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ANNEX II

CHANGES FROM THE 1968 SNA

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List of Acronyms

BPM	Balance of Payments Manual
c.i.f.	cost, insurance, freight
CPC	Central Product Classification
f.o.b.	free on board
GDI	gross domestic income
GDP	gross domestic product
GFS	Government Finance Statistics
GNI	gross national income
IMF	International Monetary Fund
ISIC	International Standard Industrial Classification
NPI	non-profit institution
OECD	Organisation for Economic Co-operation and Development
PPP	purchasing power parity
SAM	social accounting matrix
VAT	value added tax

ANNEX
CHANGES FROM THE 1968 SNA

A. Introduction

1. The revised System of National Accounts, (revised SNA), retains the basic theoretical framework of its predecessor A System of National Accounts (1968 SNA). However, in line with the mandate of the United Nations Statistical Commission, it contains clarifications and justifications of the concepts presented, it is harmonized with other related statistical systems and it introduces a number of features that reflect new analytical and policy concerns of countries and international organizations.

2. The central framework of the revised SNA is presented in T-accounts as well as in matrix format and these two presentations are fully compatible - i.e., the main transactions groupings in the T-accounts have corresponding counterparts in the matrix presentation. Also, the classifications and concepts of the central framework are internally more closely linked up with each other and more fully harmonized externally with standards of related statistical systems. It thus more fully integrates production, income, capital and financial accounts and balance sheets, and in doing so, it incorporates the guidelines given in separate United Nations manuals on balance sheets and reconciliation accounts (Series M, No.60), on tangible assets (Series M, No.68), on income distribution (Series M, No.61) and on constant prices (Series M, No.64). Furthermore, the new System describes in detail the links between the SNA and the related statistical systems on Balance of Payments, Government Finance Statistics (GFS) and Money and Banking Statistics prepared by the International Monetary Fund (IMF). Particular attention has been given to the delineation of the production boundary with regard to coverage of own-account production of goods and services. Also, more comprehensive criteria have been established for the delineation and coverage of the financial sector and identification and classification of financial instruments in light of the many innovations in this field in recent years due to financial deregulation. The central framework retains input-output tables as an integral part of the System particularly as the basis for balancing supply and demand. It includes a detailed breakdown of the household sector by sub-sectors including all accounts which facilitate the links between SNA and social accounting matrices (SAMs). The System also describes and incorporates population and employment data. The System pays special attention to the conceptual implications of some of the structural features of economies in transition.

3. There are two important elements of flexibility built into the System. The first one concerns the flexible use of classifications, which is based on a hierarchical structure of classifications of transactors, transactions and assets that permits adaptation of data detail to data availability and other specific circumstances of different countries. This flexible use of classifications, which is further developed in one of the chapters, does not change the concepts of the central framework. The second element of flexibility, which is described in another chapter, extends the System to so-called satellite accounts that use product and income concepts that are

alternative to those of the central framework. A description of satellite accounts relating to the environment provides a notable example of this kind of flexibility.

4. These changes in the general features of the System are in addition to a number of specific changes in the revised SNA as compared to the 1968 SNA, which are grouped together below in nine sections (B.1. - B.9.). The descriptions given only highlight the differences between the two Systems while refraining from exhaustive comparison of definitions. The discussion of all changes are cross-referenced to the corresponding chapters and tables.

B. SNA Revisions

1. Revision of the accounting structure and new balancing items

a. Partitioning and further integration of the accounts and balance sheets, and creation of new balancing items

(Reference: <<chapter II, Overview, paragraphs >>)

5. In the revised SNA the overall sequence of accounts of institutional units and sectors is now subdivided into current accounts, accumulation accounts and balance sheets. Thus, the accounting structure of the System integrates the Balance Sheets as an additional group. The 1968 SNA did not specify balance sheets in detail; they were developed later in a separate publication (M-60).

6. The revised SNA partitions the production account of the 1968 SNA into two accounts: a Production Account, where the balancing item is "value added", and a Generation of Income Account, with operating surplus/mixed income as the balancing item. The Generation of Income Account has been moved to the next group of accounts, i.e., Distribution and Use of Income Accounts.

7. The group of Distribution and Use of Income Accounts of the revised SNA includes the income and outlay account of the 1968 SNA together with the generation of income account, which was previously included as part of the production account. This second group of accounts is divided into the following accounts: (1) Generation of Income Account, with operating surplus/mixed income as the balancing item; (2) Allocation of Primary Income Account, with "balance of primary income" as the balancing item; (3) Secondary Distribution of Income Accounts, with "disposable income" as the balancing item; (4) Redistribution of Income Account, with "adjusted disposable income" as the balancing item; and (5) Use of Income Account, with "saving" as the balancing item.

8. The revised SNA divides the capital finance account of the 1968 SNA in order to separate the acquisition of non-financial assets from the acquisition

of financial assets and incurrence of liabilities. The two resulting accounts are (1) the Capital Account, with "net lending/borrowing" as the balancing item; and (2) the Financial Account also with "net lending/borrowing" as the balancing item. An additional aggregate called "changes in net worth due to saving and capital transfers" is identified on the right-hand side of the Capital Account.

9. In the revised SNA the reconciliation account of the 1968 SNA has been integrated into a new set of accumulation accounts which cover all changes between two successive Balance Sheets. Two new accounts are introduced: (1) the Other Changes in the Volume of Assets Account, with "changes in net worth due to other changes in volume of assets" as the balancing item; and (2) the Revaluation Account, with "changes in net worth due to nominal holding gains/losses" as the balancing item. The latter account is further broken down into two sub-accounts in order to identify so-called neutral and real holding gains/losses in both financial and non-financial assets/liabilities. These holding gains/losses stem, respectively, from general price changes and relative price changes. Consequently, the revised SNA incorporates a new balancing item, "changes in net worth", which includes three sub-elements: a) changes in net worth due to saving and capital transfers; b) changes in net worth due to other changes in volume of assets and c) changes in net worth due to nominal holding gains/losses.

b. Introduction of production accounts for all sectors and cross-classification of value added by activities and institutional sectors

(Reference: <<chapter II, Overview, paragraph ; chapter VI, The Production Account, paragraphs 1-3; chapter XV, Supply and Use Tables and Input-Output, paragraphs 105-109>>)

10. The revised SNA includes production accounts for all institutional sectors in addition to production accounts for the establishment-based industries of the 1968 SNA. In order to link these two types of production accounts, the revised SNA recommends a cross-classification of gross value added and its components by type of institutional sector and type of activity. In line with this, it no longer uses the terminology "dual sectoring" sometimes used in connection with the 1968 SNA.

c. Introduction of a new concept, called "mixed income", for unincorporated enterprises

(Reference: <<chapter II, Overview, paragraphs ; chapter VII, The Primary Distribution of Income Account, paragraphs 81-87>>)

11. The revised SNA introduces a distinction, not made in the 1968 SNA, between the operating surplus of unincorporated enterprises and the operating surplus of corporate enterprises. For this purpose, it introduces a new name

for the net operating surplus arising from the productive activities of unincorporated enterprises in the household sector (except for the surplus arising from the production of owner-occupied dwelling services). The new category is called mixed income because it usually represents a mixture of two very different kinds of value added components, i.e., compensation of employees and operating surplus.

d. Introduction of balance of primary incomes and gross national income (GNI) concepts

(Reference: <<chapter II, Overview, paragraphs and ; chapter VII, The Primary Distribution of Income Account, paragraphs 1-2 and 13-16>>)

12. The revised SNA introduces a new concept called balance of primary incomes, which is the sector equivalent of national income and is the balancing item of the Allocation of Primary Income Account. The balance of primary incomes results from the distribution of value added to labour (compensation of employees), capital (property income) and government (taxes, less subsidies, on production and imports). The sum of the balance of primary incomes across sectors is GNI, which is the new term for what was called gross national product (GNP) in the 1953 SNA.

2. Further specifications of statistical units, revisions in the sectoring and introduction of multiple sub-sectoring

a. Definitions of institutional units and establishments

(Reference: <<chapter II, Overview, paragraph ; chapter IV, Institutional Units and Sectors, paragraphs 1-5; chapter V, Establishments and Industries, paragraphs 21-24; chapter VII, The Primary Distribution of Income Account, paragraphs 118-121; chapter XV, Supply and Use Tables and Input-Output, paragraphs 13-19>>)

13. The revised SNA introduces a distinction between an analytical unit and a statistical unit, when referring to the unit of classification for the production accounts. The establishment as an analytical unit is defined by reference to one activity and one location as in the 1968 SNA, but for practical reasons and harmonization with the International Standard Industrial Classification (ISIC) rev. 3, the revised SNA introduces a statistical unit version of the establishment, which, in addition to its main activity, may also cover secondary activities of different types.

14. The revised SNA defines an institutional unit as an economic entity that is capable in its own right of owning assets, incurring liabilities and engaging in economic activities and in transactions with other units. It defines an institutional unit in the corporate sector as the smallest legal entity for which complete accounts are available. However, corporations

providing ancillary-type services to a mother corporation or other ancillary corporations of the latter are merged with the mother corporation into one single institutional unit. Also included in the corporate sectors as separate units are unincorporated enterprises owned by households or government that are not legal units but have a complete set of accounts, including information on withdrawals of entrepreneurial income analogous to the payments of dividends in the case of a corporation. In the revised SNA, the family of enterprise is not used as a statistical unit. The 1968 SNA did not include explicit definitions for institutional units but made reference to one criterion - availability of complete accounts. It did not make reference to the requirement that information on withdrawals of entrepreneurial income had to be available.

b. Explicit definition of statistical unit and gross output in agriculture

(Reference: <<chapter VI, The Production Account, paragraphs 103-107>>)

15. The revised SNA recommends that in agriculture the statistical unit and the definition of output should be the same as proposed for other market producers. The establishment in agricultural activities refers to the individual agricultural holding. As in the case of other activities, the output includes transactions between agricultural holdings but excludes products for intermediate consumption within the same agricultural holding. (Statistical information in agriculture is often not available in this form, and it may be necessary to use either the "gross-gross" measurement of output, which includes products used for intermediate consumption in the same agricultural holding, or the concept of the "national farm", in which agricultural products used either in the same or other agricultural holdings are entirely omitted.) The 1968 SNA did not deal explicitly with the definition of statistical unit and gross output in agriculture.

c. Introduction of three sub-sectors for non-financial and financial corporations, i.e., public, national private, and foreign controlled

(Reference: <<chapter IV, Institutional Units and Sectors, paragraphs 71-76 and 84>>)

16. The revised SNA recommends identifying the following sub-sectors for the non-financial and financial corporation sectors: public corporations, national private corporations and foreign controlled corporations.

17. A public corporate enterprise is one in which the government owns 50% or more of the equity or one in which the government exercises control over the enterprise's economic behaviour even if it holds 50% or less of the equity. An enterprise is also regarded as a public corporation if the majority of its

equity is held by another public enterprise in which the government holds more than 50% of the equity.

18. Foreign controlled enterprises are defined as enterprises in which more than 50% of the equity is held by non-residents. Foreign enterprises in which non-resident investment is 50% or less may be included or excluded by individual countries according to their qualitative assessment of foreign control. Foreign-controlled corporations include those direct investment enterprises that are subsidiaries and branches, as defined in the draft fifth edition of the IMF Balance of Payments Manual (BPM) and in the Organisation for Economic Co-operation and Development (OECD) Detailed Benchmark Definition of Foreign Direct Investment.

19. The 1968 SNA term "corporate and quasi-corporate enterprises" has been shortened to simply "corporations" in the revised SNA. In sub-sectoring the non-financial and financial corporate and quasi-corporate enterprises, the 1968 SNA distinguished between public and private enterprises but did not distinguish between resident enterprises that are subject to foreign control and those that are not.

d. New definition of the financial sector to include financial auxiliaries and exclude holding companies that control mainly non-financial subsidiaries

(Reference: <<chapter IV, Institutional Units and Sectors, paragraphs 79-81, 96, and 100>>)

20. The revised SNA has enlarged the 1968 SNA financial sector to include, in addition to financial corporations that incur financial liabilities and acquire financial assets on their own account, auxiliaries engaged primarily in activities that facilitate financial intermediation or provide financial services without placing themselves at risk.

21. The revised SNA recommends that holding companies should be assigned to the institutional sector in which the main activity of the group of subsidiaries is concentrated. Consequently, although holding companies often play a primarily financial role, they should be classified as financial corporations only when the preponderant activity of the group of corporations they control is financial.

e. Revised sub-sectoring of the financial corporate sector to reflect new developments in financial institutions, markets and instruments

(Reference: <<chapter IV, Institutional Units and Sectors, paragraphs 83-98; chapter XI, The Financial Account, paragraphs 56-57>>)

22. The revised SNA implicitly uses the concept of broad money as the underlying principle to sub-sector financial corporations as follows: (1) Central bank; (2) Other depository institutions; (3) Other financial intermediaries except insurance corporations and pension funds; (4) Financial auxiliaries; and (5) Insurance corporations and pension funds. However, due to the substantial variations among countries in defining broad money, the revised SNA does not include a definition of money but provides a classification of financial institutions and instruments compatible with national money definitions. Thus, the sub-sector "Other depository institutions" has been established to include all financial corporations except the central bank whose principal activity is financial intermediation and which have liabilities in the form of deposits or other financial instruments that are close substitutes for deposits and which are included in measures of money broadly defined. Where the distinction between narrow and broad money concepts is important, countries are encouraged to disaggregate this sub-sector between "Deposit money corporations", which have any liabilities in the form of deposits (narrow money), and "Other", which have liabilities in the form of deposits that are not readily transferable or in the form of financial instruments (such as short-term certificates of deposit) which are close substitutes for deposits and which are included in measures of money broadly defined. The 1968 SNA used the concept of narrow money as the classification principle for financial sub-sectors and thus included in "other financial institutions" many financial corporations that had liabilities in the form of broad money instruments.

23. Since the word "bank" has a specific legal connotation in some countries that is different from the new interpretation in the System, the revised SNA has changed two 1968 SNA related terms as follows: "depository institution" is used instead of "bank" and "financial intermediation services" instead of "banking services".

f. Separate identification of unincorporated financial enterprises as distinct from quasi-corporate financial enterprises

(Reference: <<chapter IV, Institutional Units and Sectors, paragraph 82>>)

24. The revised SNA has eliminated the 1968 SNA convention that treated all financial unincorporated enterprises as quasi-corporations. In the revised SNA, financial unincorporated enterprises, such as individuals engaged in financial intermediation or in services auxiliary to financial intermediation, are classified in the household sector.

25. In line with the above, the revised SNA treats money lenders who incur liabilities to mobilize funds as financial intermediaries included in the household sector and their output is measured according to the same rules as is output of other financial intermediaries. Money lenders who make loans from their own resources are also considered producers of financial services provided their services can be identified. Money lenders were not explicitly identified in the 1968 SNA.

g. Classification of government employee pension schemes in the financial sector

(Reference: <<chapter IV, Institutional Units and Sectors, paragraph 98>>)

26. The revised SNA, like the 1968 SNA, classifies pension funds invested entirely with the employer as part of the employer's sector, rather than placing them with insurance corporations and pension funds in the financial corporations sector. An exception has been made for government employee pension funds that are separate institutional units; they are classified in the financial corporations sector, even if most of their funds are invested in government securities for reasons of prudence, whether by legal requirement or by choice. The rationale is that investment of government employee pension funds with the employer does not indicate the degree of employer control that investment of private employee pension funds with an employer does.

h. Alternative methods of sub-sectoring for general government

(Reference: <<chapter IV, Institutional Units and Sectors, paragraph 130>>)

27. The revised SNA recommends with equal priority two ways for sub-sectoring general government: include social security funds as part of each level of government at which they operate (central, state and local government), or as a sub-sector separate from the operations of all levels of government. The 1968 SNA recommended only the latter classification, i.e., social security funds were shown as a separate sub-sector.

i. Inclusion of an additional sub-sector for state government

(Reference: <<chapter IV, Institutional Units and Sectors, paragraphs 123-127>>)

28. The revised SNA introduces state government as an additional level of government between central and local government. This breakdown is only to be applied in those countries where it is meaningful.

j. Presentation of consolidated public sector accounts in supplementary tables

(Reference: <<chapter XIX, Applications of the Integrated Framework to Various Circumstances and Needs, paragraphs 37-42>>)

29. The revised SNA recommends, for supplementary analysis, consolidated presentations of the public sector, covering general government and non-financial public enterprises in a manner consistent with GFS.

k. Revised sub-sectoring of households based on type of income and introduction of the distinction between formal and informal production activities

(Reference: <<chapter IV, Institutional Units and Sectors, paragraphs 152-161; chapter XIX, Applications of the Integrated Framework to Various Circumstances and Needs, paragraphs 9-13>>)

30. The revised SNA recommends sub-sectoring the household sector on the basis of the nature of the household's largest source of income (employers' mixed incomes, own-account workers' mixed incomes, compensation of employees, property and transfer incomes). Thus, households are allocated to sub-sectors depending on which of the four categories of income is the largest for the household as a whole, even if it does not always account for more than a half of total household income. Consequently, the following sub-sectors are distinguished: (1) employers; (2) own-account workers; (3) employees; and (4) recipients of property and transfer income. The revised SNA also suggests sub-sectoring households on the basis of other criteria of an economic, socio-economic or geographical nature. It should be noted that since the revised SNA introduces the full set of accounts (including production accounts) for the household sector and its sub-sectors, it allows analysis of the distributional effects of income generation and distribution. The 1968 SNA recommended a similar socio-economic breakdown for the household sector but did not carry it through in all accounts and tables.

31. Unlike the 1968 SNA, the revised SNA recognizes that the distinction between formal and informal sectors of the economy, or alternatively between those which use modern or traditional methods of production, is particularly important for many developing countries. However, there is no general agreement yet on criteria for distinguishing the formal and informal sectors applicable across a wide range of countries. Pending further work by the International Labour Organization on the development of universally acceptable criteria, the revised SNA nevertheless recommends the use of this distinction for analysis and policy making in specific country circumstances, and suggests that for the time being specific criteria be applied which may vary from country to country.

3. Further specifications of the scope of transactions including the production boundary

a. Further specification of the production boundary for household production activities

(Reference: <<chapter VI, The Production Account, paragraphs 14-29; chapter XXI, Satellite Analysis and Accounts, paragraphs 19 and 40>>)

32. The production boundary in the revised SNA is only slightly different from the one in the 1968 SNA. In defining the production boundary, the

revised SNA draws on the distinction between goods and services. It includes the production of all goods within the production boundary, and services in so far as they are exchanged in the market and/or generate incomes for other economic units.

33. With regard to own-account production of goods by households, the revised SNA has removed the 1968 SNA limitations which excluded the production of goods not made from primary products, the processing of primary products by those who do not produce them and the production of other goods by households who do not sell any part of them on the market.

34. The coverage of own-account production is clarified. The storage of agricultural goods produced by households is included within the production boundary as an extension of the goods producing process, as is supply of water (water-carrying).

35. The revised SNA, like the 1968 SNA, excludes from the production boundary the production of services by households for own final consumption. Included, however, is the production of services of owner-occupied dwellings and the production of services for own final consumption when paid employees are used. The revised SNA explains that in the central framework no values are imputed for unpaid domestic or personal services produced within households because the production of such services within households is a completely self-contained activity with limited repercussions on the rest of the economy, there are typically no market prices that can be satisfactorily used to value such services, and consequently the imputed values would not be equivalent to monetary values for analytic or policy purposes. The revised SNA does, however, suggest that in satellite accounts an alternative concept of gross domestic product (GDP) be elaborated which is based on an extended production boundary, reflecting estimates for household production of services for own use.

b. Voluntary labour inputs are valued on the basis of actual compensation paid

(Reference: <<chapter VII, The Primary Distribution of Income Account, paragraphs 20 and 23>>)

36. In general, neither the revised SNA nor the 1968 SNA includes an estimate of the value of voluntary labour inputs. Labour inputs are valued at actual compensation paid even if this is very low or even zero. However, in the case of production of tangible fixed assets resulting from communal activities, the value of labour input is imputed in order to calculate the cost of the assets (if a market price is not available). This imputed value of labour input is treated as mixed income.

c. Allocation of financial intermediation services to the users of these services

(Reference: <<chapter VI, The Production Account, paragraphs 128-140>>)

37. The revised SNA calculates the output of financial intermediation services indirectly measured (this term replaces the term bank service charges used in the 1968 SNA; see <<paragraph 23>> above) in the same way as the 1968 SNA, i.e., as the difference between property income received and interest paid. The property income received should exclude that part which is received from investment of own funds. However, contrary to the 1968 SNA, the revised SNA allocates this service charge between users - who could be lenders as well as borrowers - treating the allocated amount either as intermediate consumption by industry or as final demand to be included as final consumption of households or as exports, depending on the type of use. When part of the service charge is included as exports, a similar amount should be included as imports of the countries receiving the financial intermediation services. The allocation between different uses may be made on the basis of the difference between interest paid or received by financial intermediaries and a "reference rate" that does not include the value of financial intermediation services, such as an inter-bank lending rate or a central bank loan rate, or some other appropriate method. At the same time, the property income received (or interest paid) by financial intermediaries also must be decreased (or increased) by the amount of output allocated, with the corresponding payment (or receipt) similarly adjusted. The 1968 SNA did not allocate this output to users; instead it treated the output as the intermediate consumption of a notional industry.

38. The revised SNA uses a new term "output of financial intermediation services indirectly measured" to replace the 1968 SNA term "imputed output of bank services".

d. Imputations of rent on buildings owned by government and non-profit institutions (NPIs)

(Reference: <<chapter VI, The Production Account, paragraphs 97-100>>)

39. In order to assess more completely the costs of government services, the revised SNA recommends imputation of a rental value on buildings owned by government and NPIs. The valuation of these imputations should be based on a market comparator where available; if not, the sum of costs should be used, and this cost should include the opportunity cost of capital. In either case, double counting of costs already included should be avoided. The difference between the imputed rental value and the costs already included should be shown as operating surplus of government and NPIs, respectively. The 1968 SNA did not recommend rental imputations for buildings owned by government and NPIs, thus understating final consumption expenditure and GDP.

e. Inclusion, in principle, of all illegal production and other transactions

(Reference: <<chapter VI, The Production Account, paragraphs 30-36>>)

40. The revised SNA makes it clear that the illegality of an activity or transaction is not a reason for excluding it from measures of production or any transaction. Moreover, in some cases comprehensive coverage of illegal or underground activities is essential in order not to introduce in the accounts imbalances between transactions that are considered to be illegal when involving receipts (e.g., income earned in drug traffic) and legal when spent (e.g., real estate purchased by drug traffickers). The 1968 SNA did not give clear guidance on the coverage of illegal activities.

f. Identification of imputations and re-routings from other transactions

(Reference: <<chapter II, Overview, paragraphs ; chapter III, Transactions and Accounting Rules, paragraphs ; chapter XIX, Applications of the Integrated Framework to Various Circumstances and Needs, paragraphs 20-29>>)

41. The revised SNA provides for the identification of imputed transactions and re-routings wherever possible, especially when they are large and significant. In this way, analysts interested in identifying only the monetary transactions in the economy can do so. The 1968 SNA did not identify imputed transactions and re-routings.

4. Changes in the use of basic and market prices to value output, intermediate and final demand and value added and the treatment of product taxes

a. Distinction between basic, producers' and purchasers' prices in the valuation of outputs and inputs

(Reference: <<chapter VI, The Production Account, paragraphs 210-238>>)

42. The revised SNA clarifies the terminology used for the valuation of products. The System refers to output prices received by producers, which may be either basic prices or - if difficult to implement - producers' prices, and to purchasers' prices that apply to intermediate and final demand. The basic prices exclude all taxes on products less subsidies and the producer's prices only exclude value added tax (VAT) and import duties and include all other product taxes less subsidies. Both basic and producers' prices received by producers exclude trade and transport margins, while purchasers' prices which are paid by intermediate or final users include those margins.

43. When using basic prices in the valuation of output and purchasers' prices in the valuation of intermediate consumption, value added does not include any product taxes less subsidies. They are treated as taxes less subsidies on uses, borne by the purchasers of the products. On the other hand, when producers' prices are used to value output, some taxes on products are included in value added. VAT and taxes and duties on imports are treated as taxes on uses borne by the purchasers of the products and therefore not included in value added.

44. A consequence of the above treatment is that total value added is not equal to GDP. In the case of valuation of output in basic prices, all taxes and duties on imports need to be added to value added in order to derive GDP; in the case of valuation of output in producers' prices, only VAT and import duties need to be added.

45. The revised SNA has eliminated the 1968 SNA distinction between true and approximate basic prices since "true prices" is an hypothetical concept which in practice cannot be recorded. The 1968 SNA used producers' prices as the main valuation method for output and input. Basic prices together with commodity taxes were treated as a further subdivision of producers' prices, which was applied to both output and intermediate input information for the purposes of input-output analysis.

b. Revision of the classification and terminology of taxes; explicit treatment of VATs

(Reference: <<chapter VII, The Primary Distribution of Income Account, paragraphs 49-51; chapter VIII, The Secondary Distribution of Income Accounts, paragraph 41>>)

46. The revised SNA replaces the 1968 SNA term "indirect taxes" by the term "taxes on production", and replaces the distinction between "commodity taxes" and "other indirect taxes and imports" by "taxes on products" and "other taxes on production". The taxes on products are further subdivided into: (1) VAT-type taxes; (2) Taxes and duties on imports excluding VAT-type; (3) Export taxes; and (4) Taxes on products, except VAT, import and export taxes. The 1968 SNA makes only a brief reference to VATs and gives no specific recommendation for their treatment in the accounts.

47. The revised SNA has also replaced the 1968 SNA term "direct taxes" by the term "current taxes on income, wealth, etc." and the previous category of capital transfers to government, including estate and gift taxes and non-recurrent taxes on property are renamed "capital taxes".

c. Alignment of SNA and OECD/IMF tax coverage

(Reference: <<chapter VIII, The Secondary Distribution of Income Accounts, paragraphs 44-45>>)

48. The revised SNA recommends that breakdowns of taxes beyond the main categories should be in terms of the GFS and OECD Revenue Statistics tax classifications, which appear in the annex on GFS-SNA Relationships. While no calculation of total taxes is required within the revised SNA accounts, compulsory social contributions are summed with taxes to reach the concept of total taxes used by the GFS and OECD Revenue Statistics. For this purpose the revised SNA provides a breakdown of social security contributions so that compulsory contributions can be identified separately and added to taxes to match up with the GFS/OECD concept of total taxes.

5. Distinction between market and non-market concepts and introduction of alternative concepts of consumption and disposable income

a. Explicit identification, valuation and treatment of non-market transactions

(Reference: <<chapter VI, The Production Account, paragraphs 44-56 and 88-101>>)

49. The revised SNA recognizes that the distinction between market and non-market production is fundamental to the System and introduces criteria for making this distinction. The new distinction in the revised SNA between market and non-market producers is concerned with whether the goods and services produced are intended for exchange at prices that are economically significant. If so, the producers are defined as market producers.

50. The distinction between market and non-market producers replaces the distinction in the 1968 SNA between "industries" and "other producers". Own-account producers included in the 1968 SNA in "industries" are assigned in the revised SNA to the group of "non-market producers". The distinction is complementary to the classifications of the ISIC and Central Product Classification (CPC), i.e., ISIC and CPC breakdowns would apply in principle to market as well as non-market producers and products.

51. The criterion in the revised SNA for making the distinction between market and non-market production makes it possible to include all heavily subsidized public enterprises as market producers provided their prices are considered economically significant from the point of view of cost and demand. The 1968 SNA made a distinction between government producing units that sold the kind of goods and services often produced by what is called "business establishments" (private market producers) and government departments engaged in the usual social and community activities of government. The required criterion for making the distinction in the 1968 SNA was simply the existence

of a price, while in the revised SNA the distinction between market and non-market production depends on whether the price is economically significant from the point of view of cost and demand. Since it is very rare that the government departments of the 1968 SNA engaged in social and community activities charge significant prices in the revised SNA sense, they are treated generally in the same way in the revised SNA.

52. The revised SNA distinction between market and non-market production has simplified the principles of valuation. Valuation of products of market producers is always based on the prices for which they are sold in the market. Non-market production (own-account production and other production not intended for exchange in the market at prices that are economically significant) is valued on the basis of prices of similar products made by market producers where these exist (i.e., subsistence agriculture) or as the sum of costs where comparable market prices do not exist.

53. The revised SNA, like the 1968 SNA, treats all current transfers made by government to producers as subsidies, even if they benefit specific groups of the population or all households. However, recognizing the importance of these "consumption" subsidies in some countries, the revised SNA provides for a supplementary presentation of subsidies by purpose where "consumption" subsidies can be identified. This presentation would make it possible to show, outside the System, actual final consumption with an alternative valuation that includes the value of the consumption subsidy.

b. Introduction of new concepts called actual consumption and adjusted disposable income to supplement the concepts of consumption expenditure and disposable income

(Reference: <<chapter IX, The Use of Income Accounts, paragraphs 93-98>>)

54. The revised SNA introduces the concept of actual consumption for households and government to supplement the 1968 SNA concept of consumption expenditure. Actual final consumption of households covers goods and services which are effectively available to households, irrespective of whether the ultimate bearers of the expense are government, NPIs or households themselves. The actual consumption concept is based on the distinction between individual consumption (benefiting identifiable households) and collective consumption (benefiting society as a whole) within consumption expenditure by government. For households it is defined as the sum of household final consumption expenditure plus individual consumption items identified within consumption expenditure of government and NPIs. For government, actual consumption is defined as consisting only of collective consumption. NPIs, by convention, have no actual consumption; their consumption expenditures are all categorized as individual consumption and therefore included with actual consumption of households.

55. The difference between final consumption expenditure and actual consumption of households is treated in the accounts of the revised SNA as

(current) social transfers in kind provided by government and NPIs to households. For households, the imputed transfers are added to disposable income to derive the concept of adjusted disposable income; for government and NPIs, they are deducted.

56. The 1968 SNA did not identify different concepts of final consumption and disposable income. It only included one concept of final consumption expenditure and one corresponding concept of disposable income. On the other hand. the 1968 SNA had a wider concept of final consumption expenditure of households than the revised SNA, as it included not only what households actually paid, but also health and other expenditures paid or reimbursed by government for services that households are free to select or not.

c. Treatment of pension contributions and benefits as current transfers affecting disposable income of households

(Reference: <<chapter VIII, The Secondary Distribution of Income Accounts, paragraphs 7-14; chapter IX, The Use of Income Accounts, paragraphs 6, and 14-16>>)

57. The revised SNA treats pension contributions and benefits in the secondary distribution of income accounts as current transfers, which affect the level of disposable income of households. The 1968 SNA treated the difference between pension contributions and benefits in the financial accounts as part of the net equity of households with pension funds. However, in order to avoid the effect of this treatment on saving of households and maintain the financial accounts item called changes in the "net equity of households on life insurance reserves and on pension funds" in line with the 1968 SNA treatment, the revised SNA introduces an adjustment item in the Use of Income Accounts called "adjustment for the change in net equity of households on pension funds", which is recorded as "resources" for households and as "uses" for financial corporations or other sectors if the funded pension schemes are not institutional units separate from the employers.

d. Enlargement of the concept of social protection to include arrangements with insurance enterprises and education grants

(Reference: <<chapter VIII, The Secondary Distribution of Income Accounts, paragraphs 7-8, and 53-80>>)

58. In the revised SNA social contributions and benefits are not restricted to transactions with government and employers as they are in the 1968 SNA. They also include arrangements with insurance enterprises that satisfy the definition of "social". Social benefits in the System are current transfers received by households intended to provide for the needs that arise from certain events or circumstances, such as sickness, unemployment, retirement, housing, education or family circumstances. To qualify as social insurance benefits, the transfers must be provided under organized social insurance

schemes. Social insurance benefits may be provided under general social security schemes, under private social insurance schemes or by unfunded schemes managed by the employers for the benefit of their existing or former employees without involving third parties. As a consequence of the enlarged concept of social protection, education grants which in the 1968 SNA were treated as social assistance grants are treated in the revised SNA as social benefits.

e. Channelling of social transfers in kind by enterprises to households through "quasi-NPIs", provisional treatment for countries in transition

(Reference: <<chapter XIX, Applications of the Integrated Framework to Various Circumstances and Needs, paragraphs 30-35>>)

59. The revised SNA recommends an exceptional and provisional treatment for social transfers in kind made by state controlled enterprises in countries in transition to their employees as an extension of government policy to provide health, education and recreational services to the population. As a transitional treatment, it is recommended to create "quasi-NPIs" which receive a transfer from the parent enterprise and pass them on to households as social transfers in kind to be included in the Redistribution of Income In Kind Account. As a consequence of this treatment, these expenditures enter only actual consumption of households and not consumption expenditure, thus affecting adjusted disposable income and not disposable income. The 1968 SNA would have treated these expenditures as compensation in kind, entering consumption expenditure and disposable income of households.

6. Extension and further specification of the concepts of assets, capital formation and consumption of fixed capital

a. Explicit definition of asset and asset boundary and revised classification of assets

(Reference: <<chapter X, The Capital Account, paragraphs 2-12; Annex to chapter XIII, Balance Sheet>>)

60. In the revised SNA the assets recorded in the Balance Sheets of the System are economic assets. These are defined as entities over which ownership rights are enforced by institutional units, individually or collectively, and from which economic benefits may be derived by their owners by holding or using them over a period of time. With regard to the classification of assets, the revised SNA distinguishes at the first level of the classification between financial and non-financial assets. Within non-financial assets, it distinguishes between produced and non-produced assets and within each of these between tangible and intangible assets.

61. Produced assets in the revised SNA include not only tangible assets, but also intangible assets such as mineral exploration, computer software, and entertainment, literary or artistic originals.

62. Non-produced assets in the revised SNA also include tangible and intangible non-produced assets. The tangible non-produced assets include land, subsoil assets, non-cultivated biological resources and water resources. The intangible non-produced assets include patented entities, leases and other transferable contracts, purchased goodwill and other intangible non-produced assets.

63. In determining the economic asset coverage of the revised SNA in the case of natural assets such as mineral reserves, forests, orchards, plantations and so on, the economic benefit criterion is considered to manifest itself in the form of control by an institutional unit. The revised SNA includes specific guidelines with regard to natural assets that are economic assets in the SNA sense. Two types are distinguished: i.e., assets whose growth is the result of human cultivation and are treated as tangible produced assets, and all other natural assets including land, subsoil assets, non-cultivated biological resources and water resources that are not cultivated but are under control of human activities and are treated as tangible non-produced assets. The cultivated natural assets that are treated as tangible produced assets are further broken down into two groups, i.e., (1) cultivated fixed assets, covering livestock for breeding, dairy, draught, etc., and vineyards, orchards and other plantations of trees yielding repeat products, which are included in the classification under tangible fixed assets; and (2) work-in-progress on natural growth products covering the growth of products such as livestock for slaughter, timber, agricultural crops, and fruits that are the products of orchards and plantations, which are included under inventories.

64. The 1968 SNA did not include much guidance on the balance sheets of the system and consequently provided little information on the coverage of assets. In principle, however, the 1968 SNA included produced tangible and non-produced tangible and intangible assets within its asset boundary, but did not provide for the inclusion of produced intangible assets. As regards natural assets, the 1968 SNA included all categories of natural assets in its asset boundary, although in a much less systematic manner. It only included specific guidelines on agricultural crops and fruits from orchards and plantations which were recorded when harvested, and only livestock growth was recorded as the addition to a produced asset (see section 6.d. below).

b. Extension of produced assets and gross capital formation to include expenditure on mineral exploration, computer software and entertainment, literary or artistic originals

(Reference: <<chapter X, The Capital Account, paragraphs 33, and 96-101; chapter XXI, Satellite Analysis and Accounts, paragraph 68>>)

65. The revised SNA treats expenditures on mineral exploration as gross capital formation resulting in the creation of an intangible produced asset. All expenditures are included, no matter whether the exploration is successful or not. The average service lives similar to those used by mining or oil corporations in their own assets are suggested as the appropriate guide for the amortization period. The 1968 SNA treated expenditures on mineral exploration as intermediate consumption.

66. The revised SNA treats systems and standard applications computer software that a producer expects to use in production for more than one year as an intangible fixed asset, no matter whether the computer software is purchased in the market - separately or together with the hardware - or developed in-house. It also includes data bases which the enterprise expects to use for more than one year. The 1968 SNA was interpreted as treating expenditures on software which is bought as an integral part of a major hardware purchase as capital formation, but software purchased or developed independently was treated as intermediate consumption.

67. The revised SNA includes in output literary or artistic works (i.e., the writing of books, composing music, etc.) which are produced for sale whether they are produced by employees or by self-employed workers. Furthermore, it recognizes that these outputs can contribute to production in subsequent periods and therefore treats expenditures on these outputs as gross capital formation. Consequently, fees, commissions, royalties, etc. stemming from licensing others to make use of the works are treated as payments for services rendered. Accordingly, copyrights no longer appear as non-financial non-produced intangible assets giving rise to property income, as they did in the 1968 SNA.

68. Like the 1968 SNA, the revised SNA continues to treat expenditures on research and development as intermediate consumption, not capital formation. However, it recommends that these expenditures be identified within intermediate consumption to facilitate the development of satellite accounts for research and development. Consequently, there are no fixed produced assets in the accounts to which the legal title of a patent can be linked. Thus, purchase/sale of patents continue to be treated, as in the 1968 SNA, as net purchases of intangible non-produced assets, where the assets to be recorded are the patented inventions, discoveries or processes that are the result of research and development activity and not the legal titles themselves. It should be noted, however, that the revised SNA, by convention, does include licensing related services in output and, therefore, royalty and similar payments in respect of patent licenses are considered payment for services and not property income as in the 1968 SNA. The same treatment is

applied to payments for services of trademarks and franchising in respect of other non-produced intangible assets.

c. Extension of government capital formation to include expenditure on military durables, except weapons

(Reference: <<chapter X, The Capital Account, paragraphs 71-74>>)

69. The revised SNA treats as gross fixed capital formation all expenditures on military equipment of a kind that could be acquired by civilian users for purposes of production and that the military use in the same way; this would include airfields, docks, roads, hospitals and other buildings. On the other hand, military weapons, and vehicles and equipment whose sole purpose is to launch or deliver such weapons, are not to be treated as gross capital formation but as intermediate consumption. The 1968 SNA excluded from gross fixed capital formation almost all military expenditures except those on construction or alteration of family dwellings for personnel of the armed forces.

d. Treatment of cultivated natural growth as output

(Reference: <<chapter X, The Capital Account, paragraphs 89-94, and 112-115>>)

70. The revised SNA includes in output the growth of so-called cultivated assets including the growth of livestock and fishstock, vineyards, orchards, plantations and timber tracts, as well as the growth of agricultural crops and fruits which are products of plantations and the like. Prior to the use of the products, the growth of agricultural crops, livestock for slaughter, timber, etc. which is treated as output is to be recorded as work-in-progress (part of changes in inventories) at the moment of growth and not when the products are harvested. Cultivated growth should be distinguished from growth of biological resources, which are not cultivated but are under human control (such as forests used in timber logging); such growth is treated as other volume changes in the revised SNA. Output based on controlled but not cultivated growth and also output based on non-controlled natural assets (e.g., gathering of fuel wood, fruit gathering, hunting, etc.) continues to be recorded when the products are harvested. The 1968 SNA included in output (and subsequently in gross fixed capital formation) only the natural growth of livestock and fishstock. Output of agricultural products, orchards and timber tracts was recorded at the moment of harvest.

e. Treatment of assets with a long production period as changes in inventories (work-in-progress) until such time as the owner is deemed to have taken ownership

(Reference: <<chapter X, The Capital Account, paragraphs 79-83 and 87>>)

71. The revised SNA recommends that fixed assets with a long period of production should be recorded as fixed capital formation at the point when the ownership of at least some of the output produced is transferred to the eventual user of the asset. Output that is not transferred and continues to belong to the builder or producing enterprise must be recorded as either work-in-progress or as an addition to inventories of finished goods, depending on whether the asset is finished or not. The owner is deemed to have taken ownership in two situations: under a contract for purchase/sale agreed in advance and own-account construction. Any progress payments that are made from the final purchaser to the producer before completion should be treated as financial transactions. The 1968 SNA recommended that fixed assets with a long production period should be recorded as fixed capital formation at the moment the purchaser took legal possession of the assets.

f. Treatment of service output as work-in-progress

(Reference: <<chapter VI, paragraph 77; chapter X, The Capital Account, paragraph 108>>)

72. The revised SNA recognizes that certain kinds of services take a long time to produce, e.g., architectural design, software development, project development, writing of books, etc. Consequently, work-in-progress in service production is to be recorded as change in inventories by the producers of such services. The 1968 SNA always recorded output of services at the time of delivery; it did not include any work-in-progress on services.

g. Extension of government inventories to include all goods held in inventories

(Reference: <<chapter VI, The Production Account, paragraph 106; Annex to chapter XIII, Balance Sheet>>)

73. The revised SNA includes all goods held by the government in changes of inventories. This new treatment is symmetrical with the treatment of goods stored by market producers. The 1968 SNA treated strategic materials, grains and other commodities of special importance to the nation as inventories; in general, stores of other commodities were not included in inventories.

h. Retain treatment of purchases of consumer durables as final consumption expenditure but include stocks of consumer durables as memoranda items in the Balance Sheets

(Reference: <<chapter XIII, Balance Sheet, paragraphs 85-86; Annex to chapter XIII, Balance Sheet>>)

74. Like the 1968 SNA, the revised SNA treats expenditures by households on durable goods as final consumption. However, the revised SNA recognizes that information about stocks of consumer durables (defined as goods that are not used by households as stores of value or by unincorporated enterprises owned by households for purposes of production), with detail by type of durables is of considerable interest and therefore stocks of consumer durables should be presented as memoranda items to the Balance Sheets.

i. Gross fixed capital formation not resulting in an identifiable produced asset is reflected as an increased value of the produced or non-produced asset embodying it

(Reference: <<chapter X, The Capital Account, paragraphs 45-55>>)

75. In the revised SNA not all gross fixed capital formation is reflected in an identifiable asset in the Balance Sheet. In some instances there is not a one-to-one correspondence between transactions in gross fixed capital formation by type and fixed assets by type. Examples of such gross fixed capital formation items include costs of ownership transfer and major improvements to existing fixed assets, such as buildings or computer software, or tangible non-produced assets such as land, that increase their productive capacity, extend their service lives or both. The relation between the classification of changes in assets and assets was not explicitly dealt with in the 1968 SNA.

76. Consumption of fixed capital related to these capital formation elements is treated as an integral part of consumption of fixed capital of the produced assets to which these expenditures are applied. As in the case of other consumption of fixed capital, it is calculated over the life time of the asset to which the expenditures relate. By convention, the consumption of fixed capital also includes the writing off of the elements of gross fixed capital formation that add to the value of non-produced assets.

j. Extension of capital formation to include expenditures on valuables

(Reference: <<chapter X, The Capital Account, paragraphs 7 and 122-123; chapter XII, Other Changes in Assets Accounts, paragraphs 22-23; Annex to chapter XIII, Balance Sheet>>)

77. The revised SNA includes a third category of capital formation called "acquisitions less disposals of valuables", covering expenditures on produced assets that are not used primarily for production or consumption, but acquired and held as stores of value. Examples of valuables are precious metals (non-monetary gold if used as store of value) and stones, antiques and other art objects. When a valuable which was previously not included in the Balance Sheet of any sector becomes an economic asset in the revised SNA sense (see section 6.a. above), it enters the Balance Sheet of the sector in question through the account for other volume changes (economic appearance of produced assets). The 1968 SNA treated these acquisitions less disposals in various ways. In the case of households they were dealt with as final consumption expenditure.

k. Treatment of historical monuments as produced assets

(Reference: <<chapter X, The Capital Account, paragraph 85; chapter XII, Other Changes in Assets Accounts, paragraphs 22-24; chapter XIII, Balance Sheet, paragraph 37>>)

78. Historical monuments - which may include old as well as new historical monuments -- are treated in the revised SNA as produced assets. They are not separately identified but included as part of the categories of produced assets that refer to dwellings and other (non-residential) buildings and structures. Sales and purchases of historical monuments are treated as positive gross fixed capital formation of the purchasing sector and as negative capital formation of the sector selling the asset. When an historical monument which was previously not included in the Balance Sheet of any sector becomes an economic asset in the revised SNA sense (see section 6.a. above), it enters the Balance Sheet of the sector in question through the Other Changes in the Volume of Assets Account (economic appearance of produced assets). The 1968 SNA did not specifically deal with the treatment of historical monuments.

l. Treatment of fixed assets resulting from community activities as output of household production activities and as gross fixed capital formation of the sector responsible for their upkeep

(Reference: <<chapter X, The Capital Account, paragraph 85>>)

79. The revised SNA treats construction activities carried out collectively by groups of volunteers as production carried out by the households involved. The fixed assets produced in this way are recorded as gross fixed capital formation of households first and then they are allocated to the Balance Sheet of the sector responsible for their upkeep (NPI or government). The allocation is accomplished by making a capital transfer which involves a negative gross fixed capital formation of households and a positive gross fixed capital formation of the sectors NPIs serving households or general

government. While the 1968 SNA also treated the output as gross fixed capital formation, it did not provide explicit guidance on the sector to which such gross capital formation should be allocated.

m. Extension of consumption of fixed capital to assets such as roads, dams and breakwaters

(Reference: <<chapter X, The Capital Account, paragraph 78>>)

80. The 1968 SNA suggested that consumption of fixed capital need not be calculated in respect of such assets as roads, dams and breakwaters because it was assumed that the maintenance and repair performed on these assets was sufficient to ensure that these assets had infinite service lives. In practice, most assets of this kind have finite lives even though proper repair and maintenance may result in long life spans. For this reason, the revised SNA recommends that consumption of fixed capital should be calculated for assets such as roads, dams and breakwaters.

7. Further refinement of the treatment and definition of financial instruments and assets

a. Description of a broad range of financial assets and distinction between actual and contingent assets

(Reference: <<chapter XI, The Financial Account, paragraphs 16-19, and 25-28>>)

81. The revised SNA includes a more elaborate description of a broad range of financial assets and distinguishes them from non-financial assets and from financial "contingent positions" - i.e., various kinds of "options". The distinction between a financial liability and a contingent liability is made on the basis of the conditionality of the relationship between the transactors. Where an unconditional relationship exists on the part of both debtor and creditor, there exists an actual financial asset and liability. Thus, bankers' acceptances are classified as actual assets but letters of credit are not. The 1968 SNA had limited descriptions of financial assets and therefore also did not deal with contingent positions.

b. Distinction between monetary and non-monetary gold

(Reference: <<chapter XI, The Financial Account, paragraphs 63-66>>)

82. The 1968 SNA recognized two kinds of gold: (1) gold held as a financial asset, including gold owned by the monetary authorities which was not separately identified; and (2) other gold used for industrial purposes. The revised SNA distinguishes three types of gold: (1) monetary gold owned by the

monetary authorities as a component of international reserves; (2) gold held as a store of value; and (3) other gold used for industrial purposes. The last two types of gold may be owned by any entity. As was noted in <<paragraph 76>> above, gold purchased as a store of value is treated as a valuable and included in gross capital formation.

c. Less emphasis on the distinction between different types of deposits

(Reference: <<chapter XI, The Financial Account, paragraphs 69-73>>)

83. The 1968 SNA included a distinction between "currency and transferable deposits" and "other deposits". However, in view of the emphasis placed on broad money as opposed to narrow money, the revised SNA requires only the total of "currency and deposits", while suggesting that sub-elements should be compiled only if they are analytically useful.

d. Less emphasis on the short versus long term distinction with regard to loans and other financial assets

(Reference: <<chapter XI, The Financial Account, paragraphs 72-84>>)

84. The 1968 SNA short-term/long-term maturity distinction has become less relevant because of the improved facilities available in financial markets to re-finance short-term financial assets. Therefore, the revised SNA retains this distinction but only as a secondary classification criterion.

e. Extension of the coverage of technical reserves of insurance schemes to non-life insurance schemes and reserves for prepayments of premiums and claims

(Reference: <<chapter XI, The Financial Account, paragraphs 88-98>>)

85. As compared with the 1968 SNA, insurance technical reserves in the revised SNA have been expanded to cover not only life insurance but also non-life insurance. Because the income generated by technical reserves reduces the level of non-life insurance premiums, the revised SNA adjusts the calculation of the insurance service charge for non-life insurance by adding an imputed interest flow calculated over the technical reserves. By convention, estimates of the insurance service charge for external transactions ignore investment income on technical reserves (because of data constraints).

86. As compared with the 1968 SNA, the revised SNA has expanded the coverage of insurance technical reserves to cover prepayments of premiums and claims. Consequently, a new financial asset category has been identified which is called "Prepayments of premiums and reserves against outstanding claims".

87. The revised SNA has replaced the 1968 SNA term "casualty" by the term "non-life".

f. Distinction between financial leasing and operating leasing

(Reference: <<chapter VI, The Production Account, paragraphs 123-127; chapter VII, The Primary Distribution of Income Account, paragraph 109; chapter X, The Capital Account, paragraph 44; chapter XI, The Financial Account, paragraph 31; chapter XIII, Balance Sheet, paragraphs 23-24>>).

88. The revised SNA recognizes financial leases as financial instruments. Financial leases are distinguished from operating leases in that the former cover leases where the intention is to transfer all risks and rewards incident to ownership to the user of the asset. Assets acquired under financial leasing arrangements are to be treated as assets of the lessees, and the lessors hold a corresponding financial asset which is the equivalent of a loan. Lease payments under financial leases must be divided between interest payments recorded under current transactions and repayment of the loan recorded in the Financial Account. The 1968 SNA did not recognize financial leases and, as a consequence, treated them in the same manner as operating leases.

g. Identification of new financial instruments: repurchase agreements, derivatives and secondary instruments, deep discounted bonds

(Reference: <<chapter XI, The Financial Account, paragraphs 32-43>>)

89. The revised SNA identifies and provides descriptions of a number of new financial instruments which were not treated explicitly in the 1968 SNA, including repurchase agreements, derivatives and secondary instruments and deep discounted bonds.

90. Repurchase agreements include the simultaneous sale of securities with the agreement to repurchase those same securities at a later date; they are regarded as financial instruments that are similar to loans secured by securities.

91. The revised SNA recommends that the difference between the issue price and the value at maturity of zero-coupon and other deep-discounted bonds should be treated as interest and that this interest should be converted into a series of annual or quarterly payments over the full lifetime of the instruments. Deep discounted bonds were not dealt with explicitly in the 1968 SNA.

8. Harmonization between concepts and classifications of the revised SNA and the (draft) fifth edition of the BPM

a. Centre of economic interest as basic criterion for determining residence or non-residence of entities and one year rule as operational guideline

(Reference: <<chapter XIV, The External Account, paragraphs >>)

92. The revised SNA and the (draft) fifth edition of the BPM use the "centre of economic interest" as the basic criterion for determining whether or not an entity is a resident of the compiling country. As an operational guideline, the revised SNA provides that an institutional unit be normally deemed to have a centre of economic interest if it has already engaged in economic activities and transactions in the country for one year or more or if it intends to do so for one year or more. However, the revised SNA emphasizes that this operational criteria is only a guideline and not an inflexible rule.

93. With regard to the residence of individuals, the revised SNA, as well as the (draft) fifth edition of the BPM, recommends that students should be treated as residents of the country from which they originate however long they study abroad, provided they maintain an economic attachment with their country. The rationale behind this change from the 1968 SNA is that students studying abroad are mainly engaged in consumption activities instead of production activities and they return to their country of origin upon completion of their studies. With regard to the residence of individuals working abroad under long-term contracts and of technical assistance personnel, the revised SNA recommends no changes, in principle, from the 1968 SNA, but introduces a number of clarifications. In particular, it specifies that technical assistance personnel under bilateral agreements are regarded as residents of the country where they are working if they are staying for more than one year. This treatment is consistent with the treatment of personnel operating in the commercial sector and through international organizations. The (draft) fifth edition of BPM, follows the same treatment as the revised SNA as concerns technical assistance personnel, constituting a change from the fourth edition.

94. With regard to the residence of enterprises, the revised SNA recommends little change from the 1968 SNA, except in the treatment of installation services and of enterprises engaged in construction. The revised SNA recommends flexible application of the one-year rule as a guideline in both instances. Enterprises engaged in installing equipment abroad are considered residents of their home country even if the installation takes more than one year to complete. As for enterprises (or site offices) engaged in construction, criteria in addition to the one-year rule are introduced to help determine their residence. Included are such factors as whether or not there are separate sets of accounts maintained, payment of taxes, substantial physical presence, etc. The (draft) fifth edition of BPM follows the same treatment.

b. Goods exported or imported for processing and re-imported or re-exported thereafter are recorded gross

(Reference: <<chapter XIV, The External Account, paragraphs >>)

95. The (draft) fifth edition of the BPM as well as the revised SNA recommend that goods that are sent abroad for processing and later on re-imported should be recorded gross by the processing economy as well as by the economy that sent the goods for processing, if the processing involves a substantial physical change in the goods. The value of the good before and after processing should be shown as part of the trade in goods. This recommendation does not entail any change for the revised SNA from the 1968 SNA but does constitute a change between the fourth and (draft) fifth edition of the BPM. However, the (draft) BPM, while agreeing in concept, recommends on practical grounds that all processing transactions be recorded under goods on a gross basis.

c. Distinction between the treatment of investment goods exported/imported for repair

(Reference: <<chapter XIV, The External Account, paragraphs >>)

96. The revised SNA as well as the (draft) fifth edition of the BPM make a distinction between repairs performed on investment goods and repairs performed on other goods. The value of repairs on investment goods should be shown as part of trade in goods while other repairs should be classified as service items. The 1968 SNA did not make this distinction. The (draft) BPM, on practical grounds, however, includes the value of all repairs as part of trade in goods.

d. Refinement of the classification of international transactions in services in order to identify separately services, income flows, transfers

(Reference: <<chapter XIV, The External Account, paragraphs >>)

97. The (draft) fifth edition of the BPM, includes an expanded classification of international transactions in services, including financial and communication services. This BPM classification of services is compatible with the distinction made in the SNA between services on the one hand and income and transfer flows on the other. The details of the expanded classification are generally consistent with the CPC, which is the product classification used in the SNA. This implies no change in the SNA, but does constitute a change between the fourth and (draft) fifth edition of the BPM.

e. Valuation of total imports of goods in free on board (f.o.b.) values and imports by product groups in cost, insurance, freight (c.i.f.) values

(Reference: <<chapter XIV, The External Account, paragraphs >>)

98. The revised SNA, in conformity with the (draft) fifth edition of the BPM, values imports of goods on an f.o.b. basis, i.e., excluding the cost of insurance and freight services provided by residents or non-residents. Thus, the revised SNA includes the transport and insurance services provided by non-residents as imports of services. Since, as a rule, for the detailed analysis of imports of goods in supply and use and input-output tables it is not possible to obtain f.o.b. values for each category of imported goods, a global adjustment has to be made in the supply and disposition estimates in order to adjust the c.i.f. total of imports to a f.o.b. valuation. The 1968 SNA always valued imports of goods in c.i.f. values, i.e., including the cost of insurance and freight services provided by residents or non-residents. Consequently, the 1968 SNA did not record the transport and insurance services provided by non-residents on imported goods as imports of services, and imputed an export of services corresponding to transport and insurance services provided by residents on imported goods. These two distortions have disappeared in the revised SNA.

f. Sole use of the national concept of final consumption (expenditure)

(Reference: <<chapter XIV, The External Account, paragraphs >>)

99. The revised SNA no longer makes a distinction between final consumption on a domestic and national basis. As a consequence, in principle it would no longer separately identify direct purchases in the domestic market by non-resident households and resident households expenditures abroad within the classification of international transactions in services as did the 1968 SNA. Nevertheless, as these direct purchases cannot readily be identified as specific types of goods and services, they remain treated as separate adjustment items which comprise various types of goods and services which are lumped together as "travel" in the BPM. The 1968 SNA showed private final consumption expenditure as derived from final consumption of households in the domestic market first, and then adjusted it to a national basis by deducting direct purchases in the domestic market by non-resident households and adding resident household expenditures abroad.

g. Separate identification of direct foreign investments and the inclusion of reinvested earnings on direct foreign investment

(Reference: <<chapter VII, The Primary Distribution of Income Account, paragraphs 122-125; chapter XI, The Financial Account, paragraph 101; chapter XIII, Balance Sheet, paragraph 87>>)

100. The revised SNA recommends that the total and major sub-components of direct investment be shown as a memorandum item to the relevant financial instruments in the Financial Account.

101. The revised SNA, in conformity with the (draft) fifth edition of the BPM, includes the international flows of reinvested earnings attributable to direct investors as part of the property income flow in the external and corresponding domestic sector accounts. A contra-entry, equal and with opposite sign, is included in the Financial Account, under the item called "shares and other equity". Direct investment is defined as in the (draft) fifth edition of the BPM and in the OECD Detailed Benchmark Definition of Foreign Direct Investment.

h. Treatment of write-off of bad debts and expropriation of property without compensation as other changes in volume of assets

(Reference: <<chapter XII, Other Changes in Assets Accounts, paragraphs 37-39, and 50>>)

102. The revised SNA, in conformity with the (draft) fifth edition of the BPM, treats the write-off of bad debt and expropriation of property without compensation as "other volume changes". These actions affect outstanding claims in the Balance Sheets but they are not transactions to be included in the Capital and Financial nor Revaluation Accounts. In contrast, when the cancellation of a debt involves a voluntary, contractual arrangement (debt forgiveness) between the parties concerned, it is considered a transaction and the offsetting entry to the reduction in debt should be treated as a capital transfer. The 1968 SNA treated the write-off of bad debts, etc. as transactions recorded in the second part of the capital finance account with an offsetting entry reflected under current transfers.

i. Recording of reclassification of commodity gold to monetary gold and vice versa and the allocation/cancellation of SDR's as other changes in volume of assets

(Reference: <<chapter XI, The Financial Account, paragraphs 63-68; chapter XII, Other Changes in Assets Accounts, paragraph 59>>)

103. The revised SNA treats gold monetization/demonetization in the same way as the (draft) fifth edition of BPM, that is, as entries in the Other Changes in the Volume of Assets Account. The 1968 SNA treated these transactions as

exports and imports in the merchandise trade account and did not deal with SDR's because, at that time, SDR's were not in existence. The (draft) fifth edition of the BPM incorporates the same treatment as the revised SNA, in contrast to the inclusion of monetization/demonetization of gold and the allocation and cancellation of SDR's among balance of payments transactions in the fourth edition.

j. Incorporation of explicit guidelines for exchange rate conversion

(Reference: <<chapter XIV, The External Account, paragraphs >>)

104. According to both the revised SNA and the (draft) fifth edition of the BPM, the exchange rate to be used for conversion from a transactions currency into a unit of account is the rate prevailing at the transaction date, or, if that is not available, the average rate for the shortest period applicable. The midpoint between buying and selling rates should be used, and the spread between that rate and the buying or selling rate is to be classified as a financial auxiliary service charge. In the case of multiple exchange rates that are the result of official exchange rate policies, the net proceeds accruing to the authorities as a result of transactions involving these multiple rates should be treated as taxes or subsidies. These taxes or subsidies are calculated for each transaction as the difference between the value of the transaction at the actual exchange rate and a "unitary rate" which is calculated as the weighted average of all transactions in the External Account. The distribution of the total difference between the various types of taxes results from this calculation. The imputed taxes appear as global adjustments in the external accounts with counterpart items in the central bank or government accounts. The 1968 SNA did not provide any explicit guidelines for conversion and/or treatment of revenues obtained from the spread between buying and selling rates of foreign currency nor for the case of multiple exchange rates.

9. Extension of the constant price concepts and introduction of real income measures

a. Introduction of new concepts of real gross domestic income (GDI) and real national disposable income into the System

(Reference: <<chapter XVI, Price and Volume Measures, paragraphs >>)

105. The revised SNA incorporates the calculation of trading gains and losses from changes in the terms of trade as an integral part of the System. These gains and losses are added to GDP at constant prices to derive a new income aggregate called real GDI. In the calculation of gains and losses from changes in the terms of trade, the revised SNA suggests that, if there is uncertainty about what numeraire index to select to deflate the current trade

balance, the arithmetic average of price indexes for exports and imports should be used.

106. The revised SNA includes Net National Disposable Income in real terms and derives it sequentially from GDP in constant prices in two alternative ways. The recommended method is to calculate, first, real GDI as described above and then calculate real Net National Disposable Income by using the price deflator for Gross National Final Expenditures (final consumption expenditure plus gross capital formation) to convert net primary incomes and current transfers from abroad to real terms. However, the System recognizes that there is no unique way of defining income aggregates in real terms and therefore suggests an alternative method of deflation where all net current receipts from abroad including exports minus imports, primary incomes and current transfers are deflated by a single deflator, namely the implicit deflator for Net National Final Expenditures.

b. Retain nominal interest as the SNA concept

(Reference: <<chapter XII, Other Changes in Assets Accounts, paragraphs 61-65; Annex to chapter XIX, Applications of the Integrated Framework to Various Circumstances and Needs>>)

107. The revised SNA, as did the 1968 SNA, measures interest flows in the Allocation of Primary Income Account of the System in nominal terms. However, as the Revaluation Accounts do present holding gains/losses on all assets and liabilities that are denominated in monetary terms and make a distinction between nominal, neutral and real holding gains/losses, users can adjust nominal interest flows to arrive at real interest flows. An annex to <Chapter XIX, Applications of the Integrated Framework to Various Circumstances and Needs> includes a parallel treatment of interest under significant inflation. It consists in deducting from nominal interest the component of protection of the principal of the asset against inflation, which is included in nominal interest. These presentations are of particular importance for the compilation of national accounts in countries experiencing high rates of inflation.

c. Price and volume measurements

(Reference: <<chapter XVI, Price and Volume Measures, paragraphs >>)

108. The revised SNA is more flexible with regard to the calculation of volume measures for GDP and other aggregates. The best single measure of changes in real GDP is considered to be an annual volume chain index for GDP which can also be used to generate value series by extrapolating GDP in the base year. However, chain indices do not generate series for inter-related aggregates that are additively consistent, and it is therefore recommended that Laspeyres volume indices on a fixed base year should also be calculated so that additive time series of values at the constant prices of the base year

also be shown. Such Laspeyres volume indices have nevertheless to be rebased every five years or so, and at least every ten years. The 1968 SNA did not recommend the use of chain indices.

d. International comparisons of prices and volumes

(Reference: <<chapter XVI, Price and Volume Measures, paragraphs >>)

109. The revised SNA recommends that comparisons of the volume of GDP, or GDP per capita, between countries should be based on international volume indices that use the same kinds of index numbers as intertemporal price and volume measures. The relevant price indices are usually described as purchasing power parities (PPPs). However, it is recognised that it is more difficult to make reliable price comparisons between countries than between time periods in the same country, and that the construction of a set of transitive multilateral volume indices for a group of countries may create further problems. The 1968 SNA did not consider the use of PPPs to make international comparisons.

e. Identical goods or services sold at different prices should not be treated as being of different qualities in the compilation of price indexes and constant price series when there is no freedom of choice

(Reference: <<chapter XVI, Price and Volume Measures, paragraphs >>)

110. The revised SNA recommends treating identical goods or services that are sold at different prices as different products when compiling price indices. However, when purchasers are not free to choose because of rationing, lack of information or price discrimination, identical products sold at different prices must be recognised as having the same quality and their prices must be averaged to obtain a single price relative in calculating price indexes.

f. Use of representative structures in compiling price indices for unique products

(Reference: <<chapter XVI, Price and Volume Measures, paragraphs >>)

111. The revised SNA recommends in the compilation of price indexes for goods that are unique because they are tailored to meet the purchaser's particular requirements that a limited number of representative structures, e.g., ships or buildings, should be selected and carefully defined. Experts in the field are then requested to make estimates of what it would cost to construct these goods in successive years. The 1968 SNA did not include any guidance on the calculation of price indices for unique products.

g. Measurement of the real output of non-market services should be based whenever possible on output indicators

(Reference: <<chapter XVI, Price and Volume Measures, paragraphs >>)

112. The revised SNA recognises that valuing the output of non-market producers as the sum of costs does not mean that their output cannot be distinguished from the inputs used to produce them. Volume movements for non-market output should therefore be based on output and not input indicators, whenever possible. Adjustments must be made for changes in quality. The 1968 SNA gave very little guidance on the measurement of the real output of these non-market services.